

**Immunohistochemical Study of
Chemokine Receptor Expression in Non
Melanoma Epidermal Skin Tumors of
Different Biological Behavior**

Thesis

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(قُلْ إِنَّ صَلَاتِي وَنُسُكِي وَمَحْيَايَ وَمَمَاتِي لِلَّهِ
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List of Abbreviations

AC	: Actinic cheilitis
AK	: Actinic keratosis
APC	: Antigen presenting cell
BAX	: Bcl-2-associated X protein
BCC	: Basal cell carcinoma
Bcl-2	: B cell lymphoma 2
BD	: Bowen's disease
bFGF	: Basic Fibroblast growth factor
CDKN2A	: Cyclin-dependent kinase inhibitor 2a
CDKs	: Cyclin dependent kinases
DARC	: <i>Duffy antigen</i> receptor for chemokine
DC	: Dendritic cell
ECM	: Extracellular matrix
EDTA	: Ethylenediaminetetraacetic acid
EGF	: Epidermal growth factor
EQ	: Erythroplasia of Queyrat
ERK	: Extracellular regulated kinase
FOX	: Forkhead box
GAPs	: GTPase activating proteins
GEFs	: Guanine nucleotide exchange factors
Gli	: Glioma-associated oncogene homolog
HH	: Hedgehog
HPV	: Human papilloma virus
HS	: Highly significant
IHC	: Immunohistochemical

List of Abbreviations (Cont.)

KDa	: Kilodalton
KIN	: Keratinocytic intraepithelial neoplasia
LSAB	: Labeled StreptAvidin Biotin
MAP	: Mitogen activated protein
MHC-I	: Major histocompatibility class I
MMP	: Matrix metalloproteases
mTOR	: Mammalian target of rapamycin
MVI	: Mean vascularity index
NBCC	: Nevoid basal cell carcinoma
NFκB	: Nuclear factor kappa B
NK	: Natural killer
nm	: nanometer
NMSC	: Non melanoma skin cancer
NS	: Non significant
NSCLC	: Non small cell lung cancer cells
OL	: Oral leukoplakia
PBS	: Phosphate Buffered Saline
PDGF	: Platelet-derived endothelial cell growth factor
PGK	: Phosphoglyceratekinase
PI3Ks	: Phosphatidylinositol-3 kinases
PKC	: Protein kinase C
PLA2	: Phospholipase A2
PLC	: Phospholipase C
PLD	: Phospholipase D
RalGEF	: Ral guanine nucleotide exchange factors
Ras	: Rat sarcoma

XII

List of Abbreviations (Cont.)

S	: Significant
SCC	: Squamous cell carcinoma
SDF-1	: Stromal cell-derived factor-1
SHH	: Sonic hedgehog
SK	: Seborrheic keratosis
SMO	: Smoothened
TAM	: Tumor-associated macrophages
TCSC	: Tissue-committed stem cells
TGF-β	: Transforming growth factor beta
Tiam1	: T-lymphoma invasion and metastasis protein
TNF-α	: tumor necrosis factor alpha
t-PA	: tissue-type plasminogen activator
Treg	: T regulatory
VEGF	: Vascular endothelial cell growth factor
VIN	: Vulvar intraepithelial neoplasia